

TRANSPORTATION FACILITIES

The following table represents replies to a series of queries addressed the various Boards of County Commissioners in the State, by the Bureau of Statistics, with a view of presenting an authoritative table on the above subject in its relation to public roads. The County Commissioners of Kane, Morgan, Tooele and Uintah did not reply.

Counties	How many miles of public roads in the County?	Mountain roads?	Valley roads?	How many miles are passable for loaded wagons during all seasons?	How many months of the year are your roads practically impassable?	Mountain roads?	Valley roads?	What is the average load for a two horse team, 1200-lb. horses, under ordinary conditions? On good roads?	On your bad roads?	What is the average distance from source of production to market or railroad?	What are the principal products transported?	What is the average cost of transportation per 2000 lbs. per mile of farm products, etc.	What is the approximate tonnage of the various products transported to market?	Are the repairs done under direct personal supervision of the County Commissioners or a District Road Supervisor?	Would you approve placing the roads in charge of the skilled road builder under the supervision of the County Commissioners?	What is the average distance from gravel pits, shale beds or other good substantial road building material, to the roads in need of repair or construction?	How much money has been spent on permanent road construction work during the year 1906?
Beaver.....	200	30	170	120	3	2	4	5000	3000	20	Farm produce, ore	20c.	No data	Co. Commrs.	Yes	1 to 5	\$ 2,891.75
Box Elder.....	1000	500	500	400	3	3	3	5000	500	5	Farm produce	20c.	No data	D. R. Sup'or	Yes	3	"
Cache.....	378	100	278	40	3	3	3	4000		5	Farm produce	15c.	240,000 tons	Supervisor	Yes	3	No roads.
Carbon.....	147	77	70	122	3	0	0	4000	3000	10	Farm produce, coal	30c.	200 tons	Both	Yes	20	\$ 4,000.00
Davis.....	85	5	80	65	3	*	*	3500	2000	3	Farm produce	15c.	3000 tons	Supervisor	No	10	6,000.00
Emery.....	304	100	204	75	3	*	*	3000	800	40	Farm produce	20c.	1300 tons	Both	Yes	3	3,739.46
Garfield.....	280	243	37	55	3	3	*	3500	1800	75	Farm produce	*	*	Both	No	*	500.00
Grand.....	260	100	160	200	*	4	*	2000	1200	35	Farm produce	20c.	300 tons	Supervisor	No	1/2	1,450.00
Iron.....	200	70	130	130	4	5	3	3000	900	50	Farm produce	20c.	300 tons	Supervisor	Yes	1 to 40	1,592.68
Juab.....	270	30	240	Few	*	6	6	3000	1000	6	Farm produce, ore	20c.	1675 tons	Supervisor	Yes	1/2	"
Kane.....																	
Millard.....	555	85	470	300	2	2	2	3500	1000	50	Farm produce	*	No data	Supervisor	Yes	10	1,098.52
Morgan.....																	
Piute.....	150	50	100	140	2	2	*	4000	2000	30	Farm produce, ore	20c.	No data	Supervisor	No	2	1,000.00
Rich.....	115	30	85	60	3	*	*	3500	2000	35	Farm produce	15c.	No data	Co. Comm'rs	Yes	2	2,000.00
Salt Lake.....	500	75	425	All	*	*	*	4500	2000	10	Farm produce, ore	10c.	No data	Supervisor	Yes	5	112,382.47
San Juan.....	380	30	350	220	3	6	3	2500	1000	75	Farm produce	20c.	800 tons	Supervisor	Yes	3	2,500.00
Sanpete.....	430	104	326	200	6	5	*	3000	1000	*	Farm produce	40c.	No data	Supervisor	Yes	3	2,912.34
Sevier.....	280	100	180	250	*	*	*	4000	2500	5	Farm produce	20c.	No data	Supervisor	No	3	5,000.00
Summit.....	400	400	*	300	*	*	*	4000	2000	10	Farm produce, ore	5c.	No data	Supervisor	Yes	4	4,000.00
Tooele.....																	
Uintah.....																	
Utah.....	500	85	415	200	*	2	4	4000	1000	4	Farm produce	7c.	300,000 tons	Supervisor	Yes	2	13,191.19
Wasatch.....	360	165	195	310	2	*	*	3000	none	18	Farm produce	23c.	5000 tons	Both	Yes	3	3,737.91
Washington.....	300	225	75	*	*	*	*	3500	2000	100	Farm produce	20c.	*	Both	Yes	4	500.00
Wayne.....	300	250	50	250	3	3	2	2500	1500	100	Farm produce	20c.	900 tons	Supervisor	Yes	1	200.00
Weber.....	500	60	440	400	2	2	1	4000	200	15	Farm produce	8c.	3000 tons	Supervisor	Yes	6	4,000.00
Total.....	7894	2914	4980	3837													\$172,698.57

* Denotes that query was not filled in by County Commissioners.

D. R. Roberts,

Written for the Deseret Farmer.

The above table obtained through the office of the State Statistician, has several interesting features from which a number of very important deductions can be made. Noticeable among them perhaps is the manifest lack of interest on the part of some of our county officials in compiling the above information and particularly those who would not make any report at all. One is led to remark, "No wonder that our roads are so poor." The roads question is the most important one with which county officers have to deal.

The factors governing transportation are; first, time; second, the tonnage or size of the load, and third the wear and tear. These all figure in the cost of transportation. The great question is then: What is the cost at present? And how can it be cut down? And is it worth the expense and effort?

As the information is not complete in the above table we will have to roughly estimate some features in computing cost, etc. Take for instance the tonnage column, Cache and Utah counties only arriving anywhere near the approximate tonnage.

In this discussion, some features which have a minor effect are eliminated, also conditions in the counties vary, which is left to the consideration of the reader. The average load in the state on a good road is given as 3520 lbs., but of course a 1200 lb. horse team can move 7000 lb. along on a good road very nicely. The average on a bad road is 1410 lbs. and in most cases absolutely nothing. The roads are practically impassable on an average of three months every year, and this condition generally happens when the most of the tonnage has to be moved. The average price is given at 18c per ton mile for hauling. The average distance is 32 miles. Cache county tonnage is

placed at 240,000 tons which is no doubt much lower than it really is, and Utah county, at 300,000 tons, which is certainly very conservative, and does not represent much more than the beet crop alone. However, suppose in consideration of the above facts we allow an average tonnage for each county of the state at 50,000 tons per annum, which I believe is conservative enough, and we will use the figures for argument sake.

The average load on a good road, placed at 3520 lbs; and the average price 18c per ton mile, and the average distance 32 miles, would make a cost of hauling the load that distance \$10.10. On a bad road the average cost per ton mile for that distance, as it would be less than half the load and would consume fully as much if not more time, would considerably more than double the cost or about 44c per ton mile. If the roads were improved so that the load could be 7000 lbs. instead of 3500 lbs., the time required

being practically the same and the same money made or saved, and on twice the business done, or at the rate of 9c per ton mile, (and probably one-half of our produce goes over a bad road) it will be reasonable to presume that our loss on the entire tonnage is one-half or 9c. per ton mile and for 32 miles is \$2.88 per ton, and on 50,000 tons will equal \$144,000 for each county, and for 27 counties it aggregates a loss of \$3,888,000 per annum, and this is very conservative. This is part of the freight tonnage only, and nothing is said of the passenger traffic. Just double the above figures and you will come nearer our real loss annually.

Again, road building is easily accessible, the average distance being a haul of about 3 miles. A good screened gravel or classified macadam road 16 ft. wide, 1 foot deep in center, tapering to 6 inches on the sides, can be built for about \$4000